



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
-----------------	-------------	----------------------	---------------------	------------------

09/934,549

08/23/2001

Lin Cheng

TS01-285

9167

54657 7590 06/05/2007
DUANE MORRIS LLP
IP DEPARTMENT (TSMC)
30 SOUTH 17TH STREET
PHILADELPHIA, PA 19103-4196

EXAMINER

TRAN, HANH VAN

ART UNIT

PAPER NUMBER

3637

MAIL DATE

DELIVERY MODE

06/05/2007

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	09/934,549	LIN CHENG	
	Examiner	Art Unit	
	Hanh V. Tran	3637	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 27 February 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-8 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-8 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 27 February 2007 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. This is the Final Office Action from the examiner in charge of this application in response to applicant's amendment dated 2/27/2007.

Claim Objections

2. Claim 8 is objected to because of the following informalities: it is a method claim, but currently is depending on apparatus claim 1. For the purpose of this examination, the examiner is considering that claim 8 depends on method claim 1. Appropriate correction is required.

Drawings

3. The drawings were received on 2/27/2007. These drawings are acceptable.
4. In addition to Replacement Sheets containing the corrected drawing figure(s), applicant is required to submit a marked-up copy of each Replacement Sheet including annotations indicating the changes made to the previous version. The marked-up copy must be clearly labeled as "Annotated Sheets" and must be presented in the amendment or remarks section that explains the change(s) to the drawings. See 37 CFR 1.121(d)(1). Failure to timely submit the proposed drawing and marked-up copy will result in the abandonment of the application.

Claim Rejections - 35 USC § 112

5. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

6. Claims 1-8 stand rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which

Art Unit: 3637

applicant regards as the invention. The recitation in the claims of Cartesian coordinates is vague and indefinite for failing to clearly define the metes and bounds of the claimed invention. Applicant's argument regarding this rejection will be addressed below under "Response to Arguments."

Claim Rejections - 35 USC § 103

7. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

8. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

9. Claims 1-8 are rejected under 35 U.S.C. 103(a) as being unpatentable over USP 6,421,113 to Armentrout in view of USP 4,999,671 to Iizuka, USP 5,787,057 to Fan, USP 6,454,512 to Weiss, USP 5,749,589 to Hopkins et al, Germany 3,917,874 to Seibert, USP 4,293,075 to Veralrud, and USP 5,873,585 to Engelking.

Armentrout discloses a reticle housing comprising, such as shown in Fig 9, an upper portion, said upper portion comprising top, bottom, front, back, left and right surfaces, a door for access to the housing (col. 4, lines 18-20), component box support units 202 being mounted in a plane, adjacent rows of component support units being separated by a distance, the component support units being extended from the front

Art Unit: 3637

surface to the back, cushioning units 202A, Fig 8A, being arranged over the surface of the component box support units 202, wherein the housing being constructed of an anti-Electro Static Discharge material. The differences being that Armentrout does not disclose the housing having a lower portion comprising wheels, a platform having a first and a second surface opposite said first surface, said wheels attached to the first surface of the platform, shock absorbers being mounted on the second surface of the platform forming an interface between said platform and the upper portion, the bottom surface of the upper portion disposed over the shock absorbers, upper portion dividers provided parallel to the left and right surfaces, the component support units slanting in a downward direction with respect to a plane of the platform, a set of two sliding doors mounted in the plane of the front surface, and a handle attached to the upper portion, and the method steps of claims 4-8.

Iizuka teaches the idea of providing a reticle housing with wheels in order to facilitate transporting the housing. Fan teaches the idea of providing a transport cart with a lower portion comprising wheels, a platform having a first and second surface, said wheels attached to the first surface of the platform in order to provide a sturdy transport cart. Weiss teaches the idea of having shock absorbers 32 being mounted on the second surface of a platform in order to prevent damage to the wafers due to jolting of the cart during transporting of the wafers. Hopkins et al further teaches the idea of providing shock absorbers 76 being disposed between a platform 35 and an upper portion 21, such as shown in Fig 4, in order to absorb vibration between the platform 35 and the upper portion 21. Seibert teaches the idea of providing a transport cart with

upper portion dividers therein to provide multiple compartments in order to increase the number of component support units therein. Veralrud teaches the idea of having the component support units in a storage housing being slanted in a downward direction with respect to a plane of the horizontal bottom panel in order to prevent components placed on the support units from falling out. Engelking teaches the idea of providing a transport cart with sliding doors 110 in order to allow access to contents of the housing without having to pivot the door, and further providing a handle attached to the upper portion in order to easily manipulate the cart. Therefore, it would have been obvious to modify the structure of Armentrout by providing the reticle housing with wheels in order to facilitate transporting the housing, as taught by Iizuka, providing the transport cart with a lower portion comprising wheels, a platform having a first and second surface, said wheels attached to the first surface of the platform in order to provide a sturdy transport cart, as taught by Fan, providing shock absorbers being mounted on the second surface of the platform in order to prevent damage to the reticle due to jolting of the cart during transporting of the reticle, as taught by Weiss, providing shock absorbers being disposed between the platform and the upper portion in order to absorb vibration between the platform and the upper portion, as taught by Hopkins et al, providing the transport cart with upper portion dividers therein to provide multiple compartments in order to increase the number of component support units therein, as taught by Seibert, having the component support units being slanted in a downward direction with respect to a plane of the platform in order to prevent components placed on the support units from falling out, as taught by Veralrud, and providing sliding doors in order to allow

Art Unit: 3637

access to contents of the housing without having to pivot the door, and further providing a handle attached to the upper portion in order to easily manipulate the cart, as taught by Engelking, since each of the references teach alternate conventional component housing structure, used for the same intended purpose of housing components therein, thereby providing structure as claimed. In regard to the method steps of claims 4-8, since Armentrout, as modified, discloses all the structural elements recited therein, it would have been obvious and well within the level of one skill in the art to perform the method steps recited therein.

Response to Arguments

10. Applicant's arguments filed 2/27/2007 regarding 112(2) rejection of the Cartesian coordinates have been fully considered but they are not persuasive. In response to applicant's argument on page 11 that the recitation in the claims of Cartesian coordinates "provides a suitable means for describing the relative configuration and orientation of the claimed components", the examiner takes the position that that it is not clear which multiple components applicant is referring to, since the claimed language of the Cartesian coordinates describing what "said upper portion comprising", not the upper portion comprising a plurality of components and then describing the relative configuration and orientation of said claimed components as alleged by the applicant.

11. In response to applicant's argument on pages 11-12 that "the use of Cartesian coordinates in the claims to describe the relative configuration of the claimed features, assists in keeping the claims brief and concise", the examiner takes the position that it is not clear which multiple features applicant is referring to. Further, the components of

Art Unit: 3637

the upper portion can be easily defined as comprising a top, a bottom, a front, a rear, and two sides.

12. Applicant's arguments with respect to claims 1-8 regarding the art rejection under 103(a) have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

13. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Cherukuri, Cartier, Jarl et al, Southworth et al, Yamamoto et al, Welsch et al, Smith et al, Greathouse, Hays et al, and Hansen all show structures similar to various elements of applicant's disclosure.

14. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

Art Unit: 3637

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Hanh V. Tran whose telephone number is (571) 272-6868. The examiner can normally be reached on Monday-Thursday, and alternate Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Lanna Mai can be reached on (571) 272-6867. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

HVT *HVT*
May 21, 2007

LANNA MAI
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 3600



Application No. 09/934,549
Inventor: Lin Cheng
"Reticle Box Transport Cart"
Replacement Sheet 1 of 1

Acceptable!
HNT 5/21/08

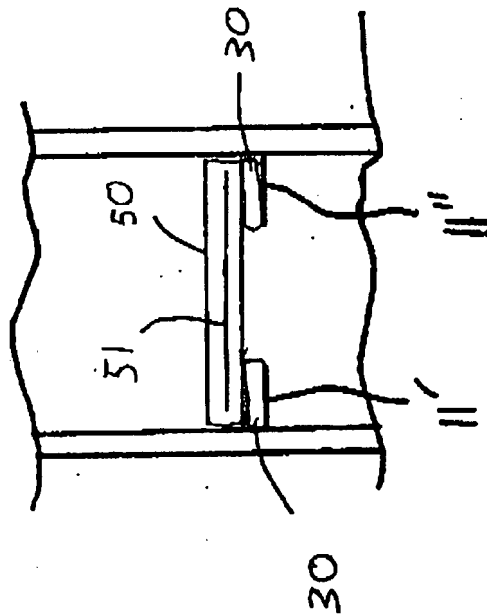


Fig. 2